



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTORNEY DOCKET NO. 049411-0268

Applicant: Hongxing TANG et al.

Title: STRAIN SENSORS BASED ON NANOWIRE PIEZORESISTOR
WIRES AND ARRAYS

Appl. No.: 10/826,007

Filing Date: 04/16/2004

Examiner: Unassigned

Art Unit: 2855

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56. A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

All of the documents are in English.

Applicants respectfully request that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.


The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

Date

4/28/05

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Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 1

Complete if Known

Application Number	10/826,007
Filing Date	04/16/2004
First Named Inventor	Hongxing TANG et al.
Group Art Unit	2855
Examiner Name	Unassigned
Attorney Docket Number	049411-0268

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	A1	2003/0062193	A1	THAYSEN et al.	04/03/2003	
	A2	2003/0089182	A1	THAYSEN et al.	05/15/2003	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A3	HARLEY et al., "High-Sensitivity Piezoresistive Cantilevers Under 1000 A Thick," Physics Letters, Vol. 75, No. 2, American Institute of Physics, July 12, 1999, pp. 289-291.	
	A4	HARLEY et al., "1/F Noise Consideration for The Design and Process Optimization of Piezoresistive Cantilevers," Journal of Microelectromechanical Systems, Vol. 9, No. 2, IEEE, June 2, 2000, pp. 226-235.	
	A5	HUTTER et al., "Calibration of Atomic-Force Microscope Tips," Rev. Sci. Instrum., Vol. 64, No. 7, American Institute of Physics, July 1993, pp. 1868-1873.	
	A6	KUCZYNSKI, "Effect of Elastic Strain on The Electrical Resistance of Metals," Physical Review, Vol. 94, No. 1, April 1, 1954, pp. 61-64.	
	A7	LI et al., "Thin Gold Film Strain Gauges," J. Vac. Sci. Technol., Vol. 12, No. 3, American Vacuum Society, May 1994, pp. 813-819.	
	A8	PARKER et al., "Electrical Resistance-Strain Characteristics of Thin Evaporated Metal Films," Journal of Applied Physics, Vol. 34, No. 9, September 1963, pp. 2700-2708.	
	A9	Physics Web, "Nanoelectromechanical Systems Face The Future," Physics World Magazine, Vol. 14, Issue 2, February 2001, http://physicsweb.org/article/world/14/2/8 .	
	A10	REID et al., "6-MHz 2-N/m Piezoresistive Atomic-Force-Microscope Cantilevers With INCISIVE Tips," Journal of Microelectromechanical Systems, Vol. 6, No. 4, IEEE, December 4, 1997, pp. 294-302.	
	A11	THAYSEN et al., "Polymer-Based Stress Sensor With Integrated Readout," Journal of Physics D: Applied Physics, Vol. 35, Institute of Physics Publishing Ltd., 2002, pp. 2698-2703.	
	A12	TORTONESE et al., "Atomic Resolution With An Atomic Force Microscope Using Piezoresistive Detection," Applied Physics Letters, Vol. 62, No. 8, American Institute of Physics, February 22, 1993, pp. 834-836.	
	A13	YANG et al., "Monocrystalline Silicon Carbide Nanoelectromechanical Systems," Applied Physics Letters, Vol. 78, No. 2, American Institute of Physics, January 8, 2001, pp. 162-164.	

 Examiner
Signature

 Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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